

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Shunpei Yamazaki, et al.	Art Unit :	2813
Serial No. :	09/451,665	Examiner :	Laura Schillinger
Filed :	November 30, 1999	Conf. No. :	9359
Title :	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF		

Mail Stop Amendment

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO ACTION OF JULY 3, 2006

Claims 1, 2, 4, 5, 7-13, 15, 16, 18-23, 25, 26, 28-34, 36, 37, 39-81 and 83 are pending. Claims 12, 13, 15, 16, 18-23, 25, 26, 28-34, 36, 37 and 39-81 have been withdrawn, leaving claims 1, 2, 4, 5, 7-11 and 83 under consideration with claim 1 being independent.

Claims 1, 2, 4, 5 and 7-11 have been rejected as being anticipated by Farrenkopf (U.S. Patent No. 5,889,315). Applicant requests reconsideration and withdrawal of this rejection because Farrenkopf does not describe or suggest forming a crystalline semiconductor film on an insulating surface or introducing a dopant impurity into the crystalline semiconductor film such that a peak of a concentration profile of the dopant impurity is located in an insulating film formed on the crystalline semiconductor film, as recited in claim 1.

First, while the rejection appears to assert that the lower epitaxial layer 22 (which the rejection equates with the recited substrate) is formed on an insulating surface, this is not the case. Rather, the layer 22 is formed on a conductive substrate 20 having a resistivity of 5-50 (typically 20) ohm-cm. See Farrenkopf at col. 8, lines 20-31.

Second, while the rejection asserts that Farrenkopf teaches introducing a dopant impurity through the insulating film 168, the rejection appears to ignore the further recitation in claim 1 that the dopant impurity is introduced into the crystalline semiconductor insulating film (i.e., the lower epitaxial layer 22). Moreover, in presenting arguments about the concentration profile of the dopant impurity, the rejection acknowledges that the dopant is not introduced into the layer 22.

For at least these reasons, the rejection should be withdrawn.

Claims 7 and 11 have been rejected as being unpatentable over Farrenkopf in view of Takemura (U.S. Patent No. 5,403,762). Applicant requests reconsideration and withdrawal of this rejection because Takemura does not remedy the failure of Farrenkopf to describe or suggest the subject matter of claim 1.

Applicant submits that all claims are in condition for allowance.

No fee is believed to be due in connection with the filing of this paper on the Electronic Filing System (EFS). In the event that any fees are due, please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 10/3/06



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